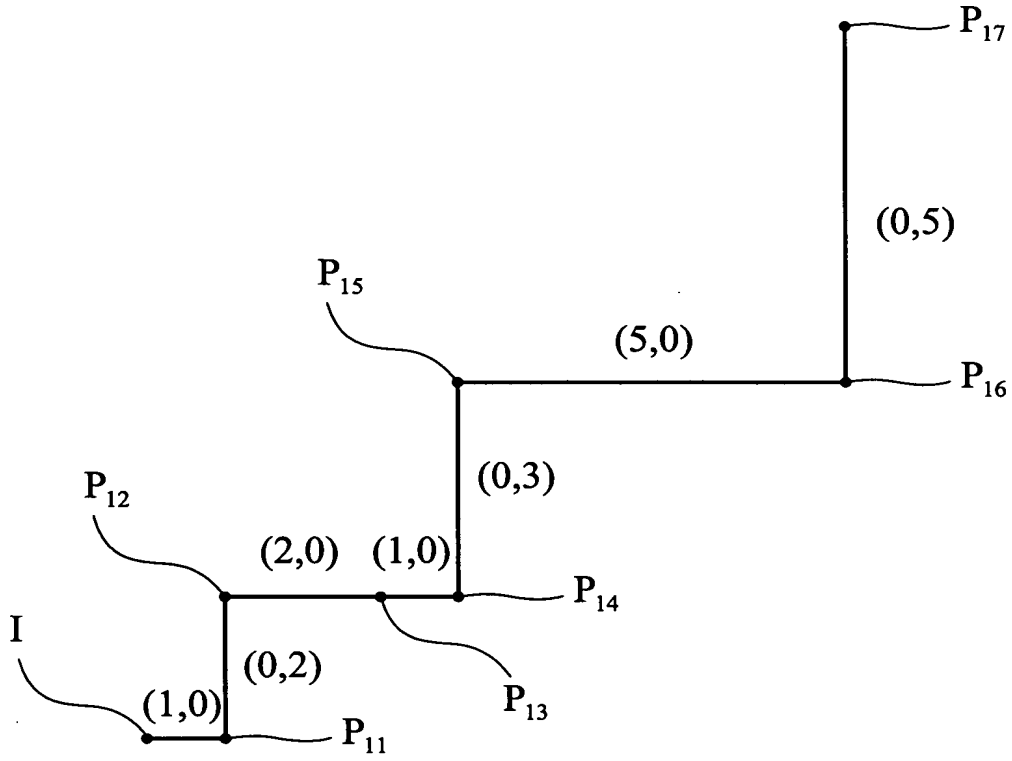

FIG. 1 (RELATED ART)

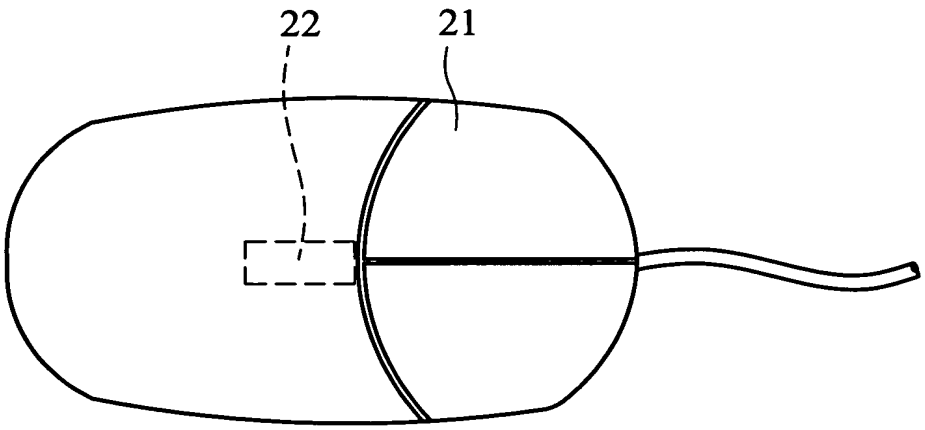

FIG. 2

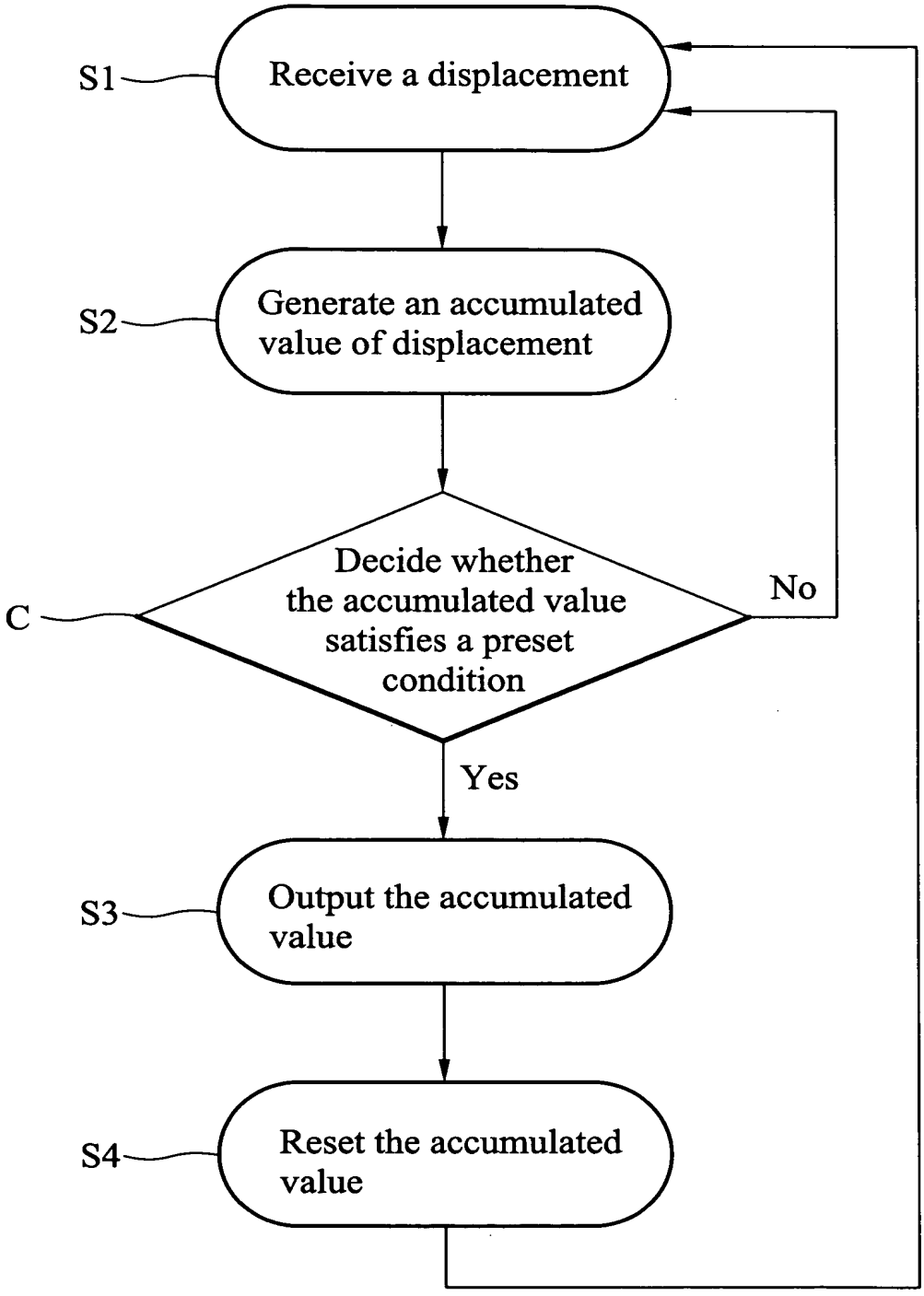
S1
Receive a displacement
S2
Generate an accumulated value of displacement
C
Decide whether the accumulated value satisfies a preset condition
No
Yes
S3
Output the accumulated value
S4
Reset the accumulated value

FIG. 3

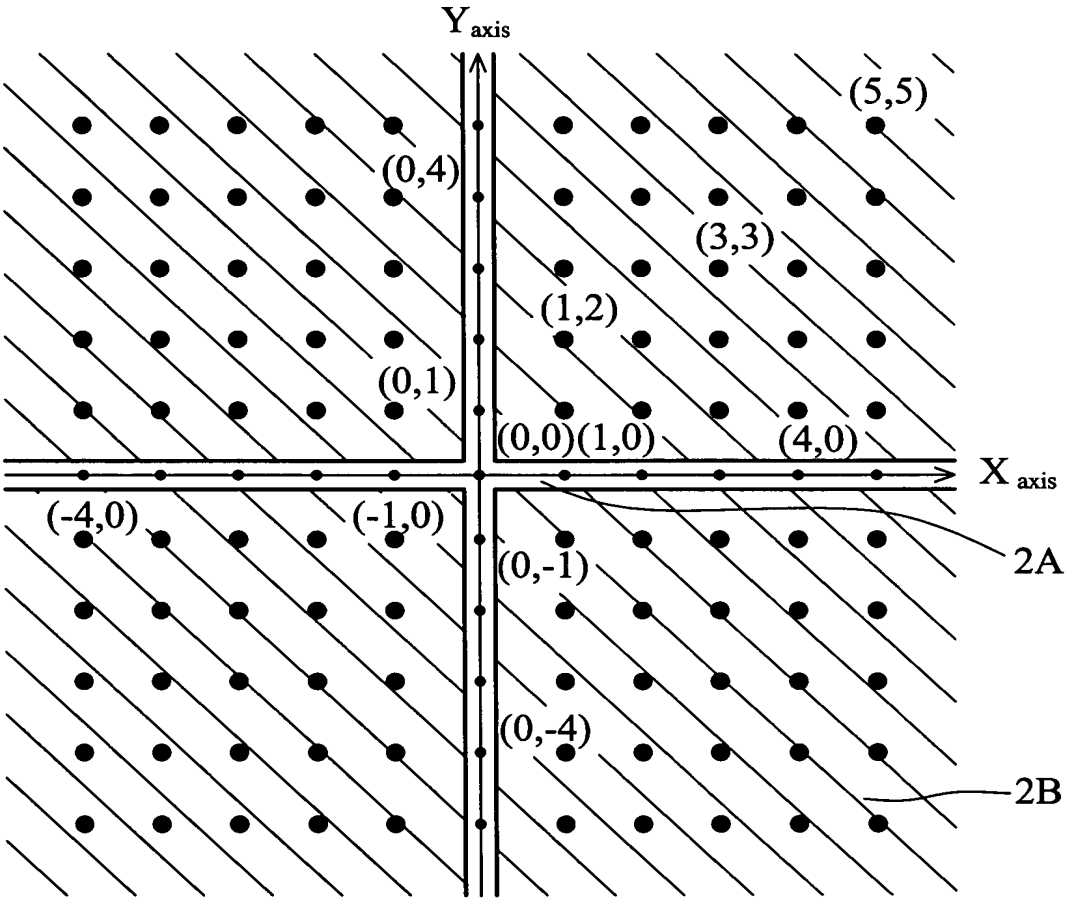

FIG. 4

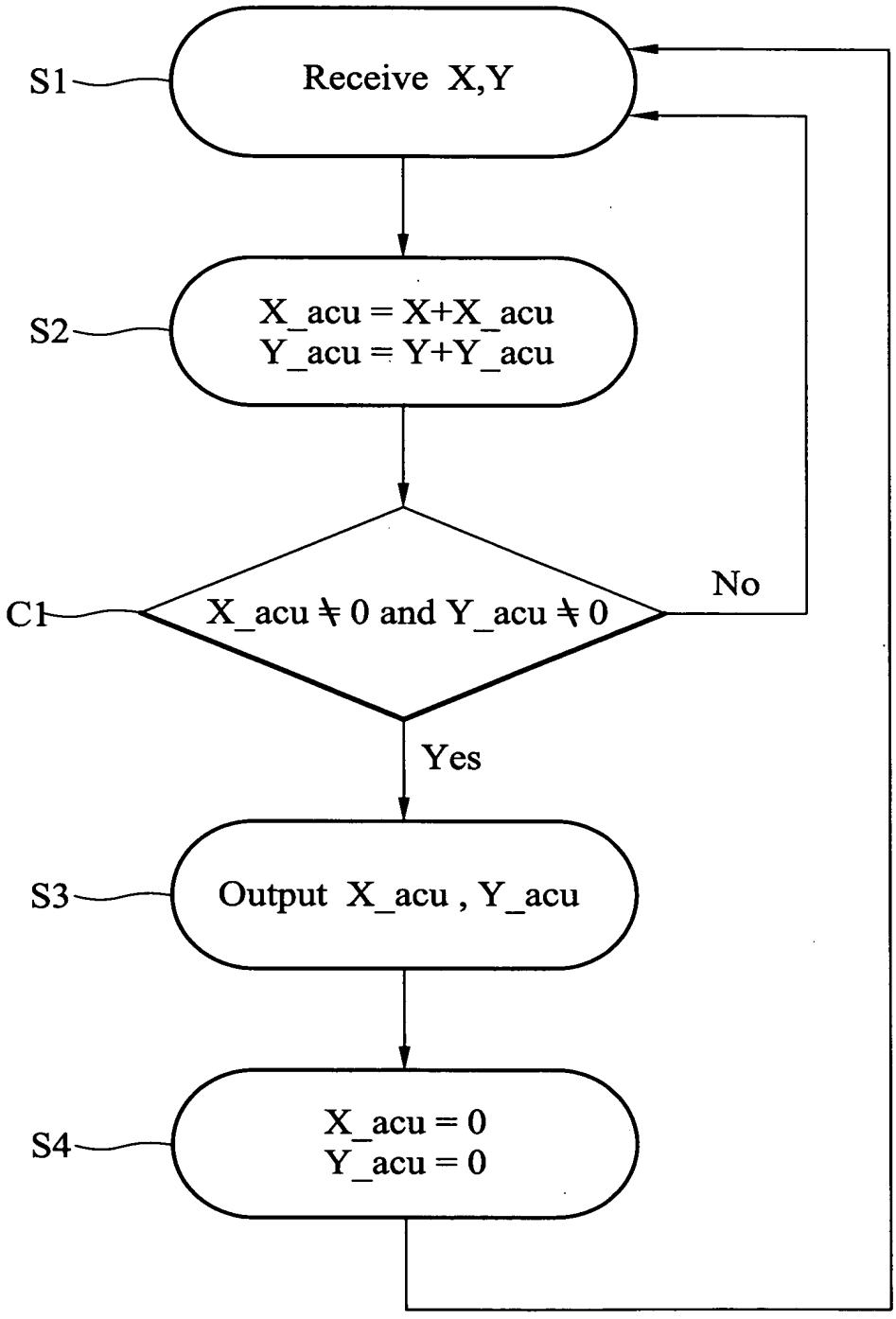
S1
Receive X,Y
S2
X_acu = X+X_acu
Y_acu = Y+Y_acu
C1
X_acu ≠ 0 and Y_acu ≠ 0
No
Yes
S3
Output X_acu , Y_acu
S4
X_acu = 0
Y_acu = 0

FIG. 5

Relative Displacement of Mouse (X,Y)	Present Accumulated Value (X_acu,Y_acu)	Output Displacement
	(0,0)	
(1,0)	(1,0)	
(0,2)	(1,2)	(1,2)
	(0,0)	
(2,0)	(2,0)	
(1,0)	(3,0)	
(0,3)	(3,3)	(3,3)
	(0,0)	
(5,0)	(5,0)	
(0,5)	(5,5)	(5,5)
	(0,0)	

FIG. 6

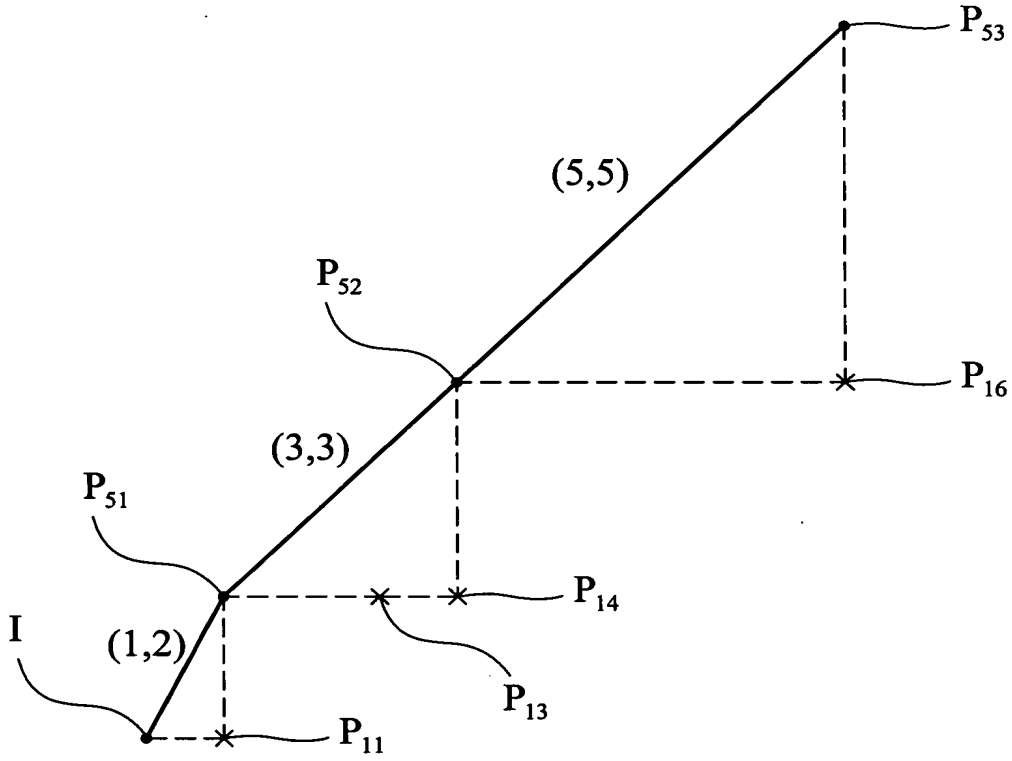

FIG. 7

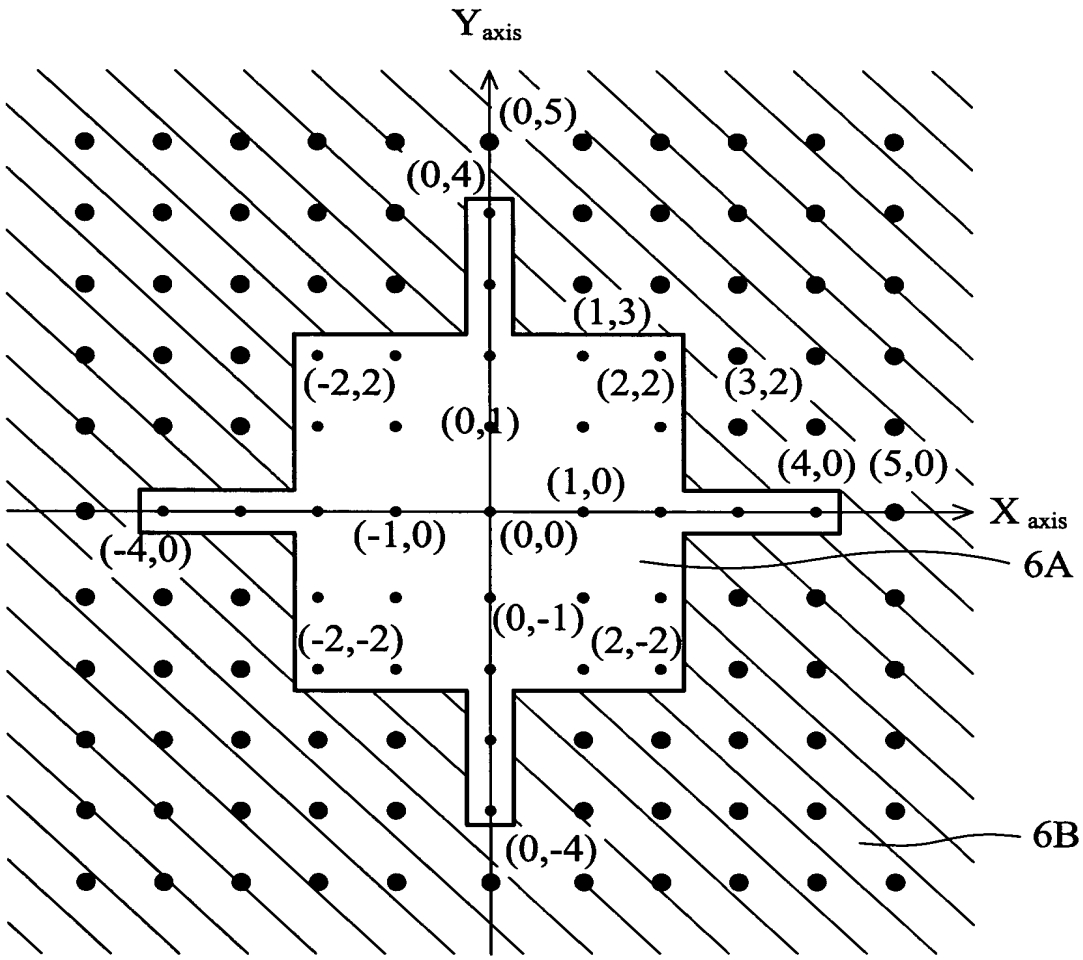

FIG. 8

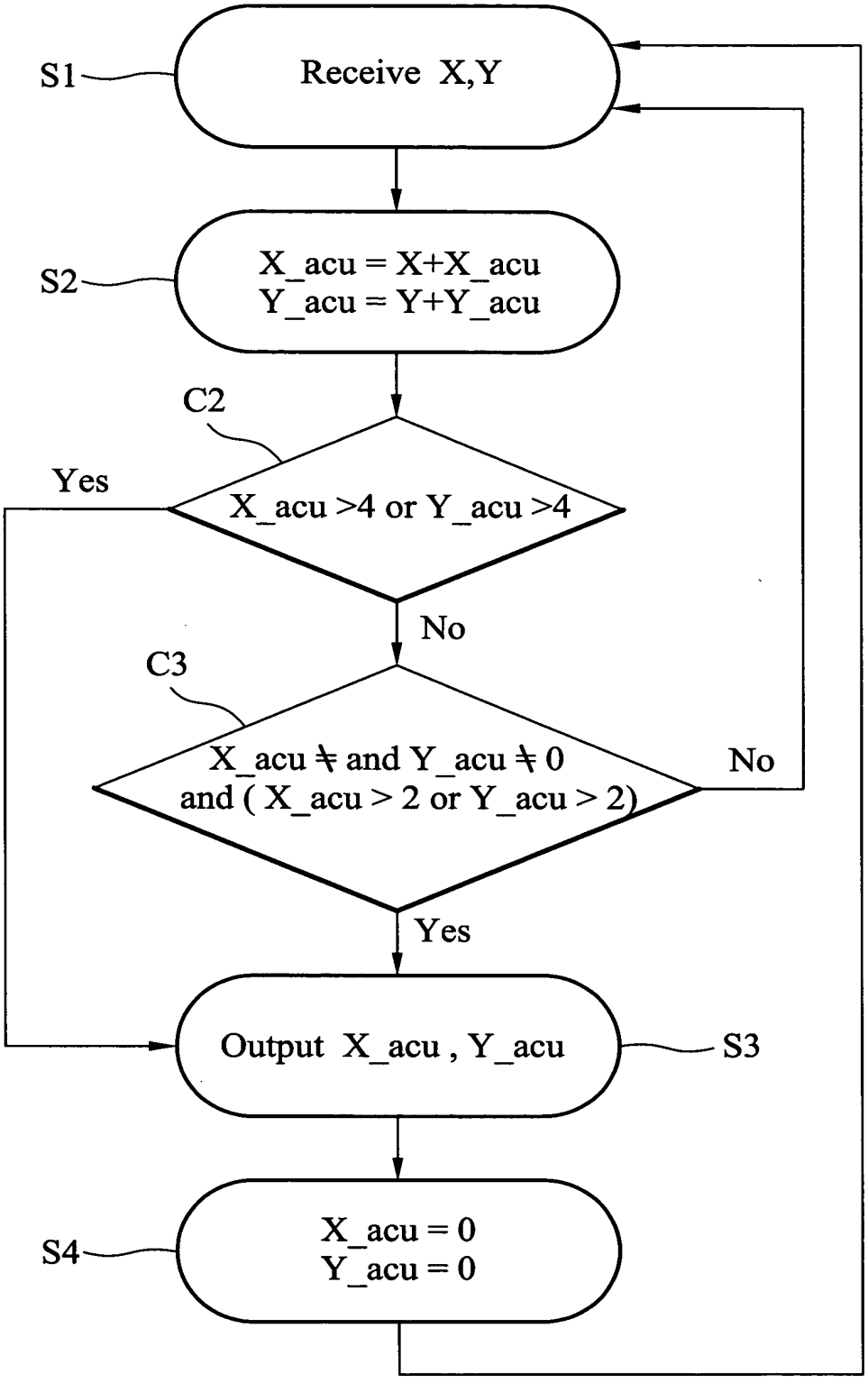
S1
Receive X,Y
S2
X_acu = X+X_acu
Y_acu = Y+Y_acu
C2
Yes
X_acu >4 or Y_acu >4
No
C3
X_acu ≠ and Y_acu ≠ 0
and (X_acu > 2 or Y_acu > 2)
No
Yes
Output X_acu , Y_acu
S3
S4
X_acu = 0
Y_acu = 0

FIG. 9

Relative Displacement of Mouse (X,Y)	Present Accumulated Value (X_acu,Y_acu)	Output Displacement
	(0,0)	
(1,0)	(1,0)	
(0,2)	(1,2)	
(2,0)	(3,2)	(3,2)
	(0,0)	
(1,0)	(1,0)	
(0,3)	(1,3)	(1,3)
	(0,0)	
(5,0)	(5,0)	(5,0)
	(0,0)	
(0,5)	(0,5)	(0,5)
	(0,0)	

FIG. 10

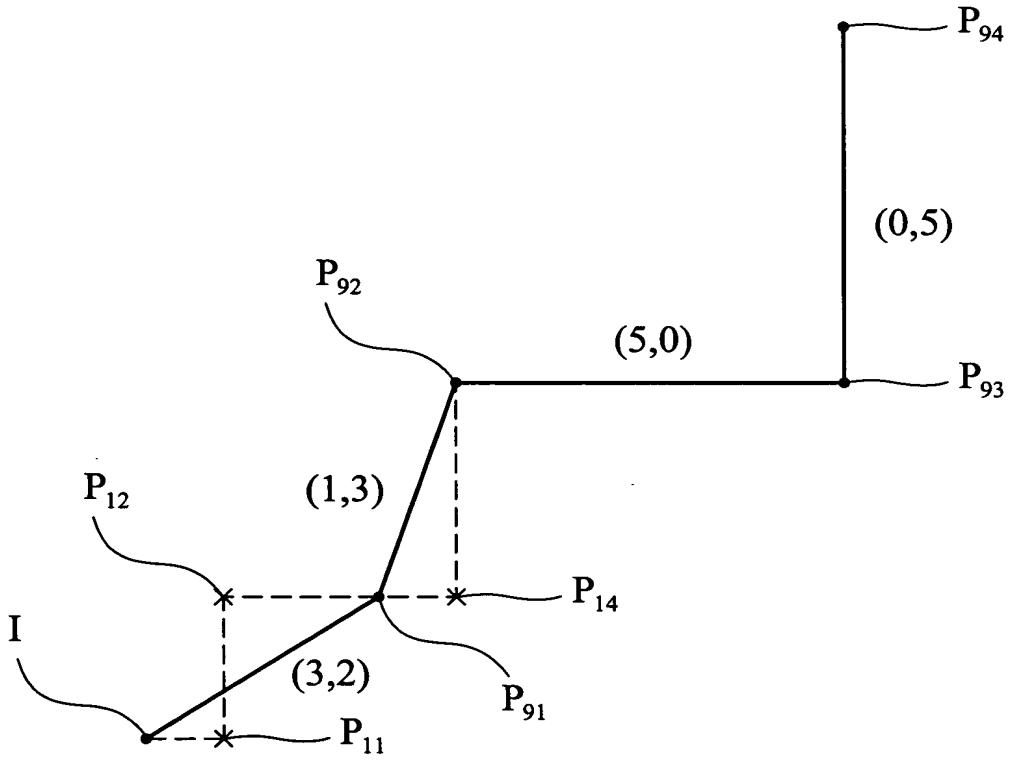

FIG. 11